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Docket No. 60,469-037
PA-000.04812-US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	O'Donnell, Hugh James, et al.
Serial No.:	09/921,803
Filed:	08/03/2001
Group Art Unit:	3654
Examiner:	Kruer, Stefan
Title:	ELEVATOR BELT ASSEMBLY WITH WAXLESS COATING

CORRECTED APPEAL BRIEF

Box AF
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This is submitted in response to the Notification of Non-Compliant Appeal Brief mailed February 20, 2008.

No fees are due, however, the Commissioner is authorized to charge Deposit Account No. 50-1482 in the name of Carlson, Gaskey & Olds for any additional fees or credit the account for any overpayment.

Real Party in Interest

Otis Elevator Company is the real party in interest. Otis Elevator Company is a business unit of United Technologies Corporation.

Related Appeals and Interferences

There are no related appeals or interferences.

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Status of the Claims

Claims 6-8 and 16-26 are pending and on appeal. Claims 1-5 and 9-15 were cancelled.

Claims 6-8, 17, 21 and 23-26 stand rejected under 35 U.S.C. §103 as being unpatentable over U.S. Patent No. 4,624,097 ("the *Wilcox* reference") in view of U.S. Patent No. 3,848,037 ("the *Harper* reference").

Claims 16, 18-19, 20 and 22 stand rejected under 35 U.S.C. §103 as being unpatentable over the *Wilcox* reference in view of the *Harper* reference and in further view WO 98/29326 ("the *Aulanko, et al.* reference").

Status of Amendments

There are no unentered amendments.

Summary of Claimed Subject Matter

Independent claim 6 recites a method of making an elevator rope assembly, comprising: arranging a plurality of elongate load carrying members in a selected arrangement (paragraph 12, page 3, lines 13-15); and coating the load carrying members with a urethane coating that does not contain wax (paragraph 14, page 3, line 21).

Independent claim 18 recites a method of making an elevator belt, comprising: coating a plurality of elongate load carrying members with a rectangular, waxless urethane coating (paragraphs 13-14, page 3, lines 16-21 and Figure 2).

Independent claim 21 recites a method of making an elevator rope assembly, comprising: coating an entire plurality of elongate load carrying members with a single, waxless, urethane coating (paragraphs 13-14, page 3, lines 16-21).

An elevator roping assembly designed according to this invention provides superior friction characteristics within an elevator system. The waxes that otherwise interfere with

friction and which may build up on sheaves within the elevator system are eliminated, and therefore a more consistent operation is achieved. (Paragraph 17, page 4, lines 18-21)

Claims 24-26 are argued separately because each of these claims requires that the load carrying members are metallic. (Page 3, line 12)

Ground of Rejection to be Reviewed on Appeal

Claims 6-8, 17, 21 and 23-26 stand rejected under 35 U.S.C. §103 as being unpatentable over U.S. Patent No. 4,624,097 ("the *Wilcox* reference") in view of U.S. Patent No. 3,848,037 ("the *Harper* reference").

Claims 16, 18-19, 20 and 22 stand rejected under 35 U.S.C. §103 as being unpatentable over the *Wilcox* reference in view of the *Harper* reference and in further view WO 98/29326 ("the *Aulanko, et al.* reference").

Argument

There is no *prima facie* case of obviousness. The primary reference relied upon by the Examiner expressly teaches that using a urethane including a wax is beneficial to achieve the intended results of that reference. The Examiner's proposed modification includes removing the wax required by the primary reference. Such a modification is not possible and there is no *prima facie* case of obviousness.

The rejection of claims 6-8, 17, 21 and 23-26 based upon the proposed combination of the *Wilcox* and *Harper* references must be reversed

The Examiner's proposed modification of the *Wilcox* reference cannot be made because it goes directly contrary to the express teachings of the reference, removes an intended feature from the reference, prevents the reference from achieving its intended result and provides no benefit to the arrangement of the *Wilcox* reference. Additionally, even if the proposed combination were

made, it would not result in the claimed invention. If any of those reasons existed, there would be no *prima facie* case of obviousness. Because all of them exist, there is an overwhelming indication that there is no *prima facie* case of obviousness.

The *Wilcox* reference teaches, "It is an object of the present invention to provide a synthetic plastic rope which can be made using ***conventional rope making techniques and equipment***." (Column 1, lines 44-46, emphasis added)

The *Wilcox* reference teaches that the jacket 32 is preferably made of HYTREL (column 2, line 18) and that "a fatty acid amide was used as a lubricant during manufacture so that this lubricant was present in the finished rope." (Column 3, lines 1-3) The *Wilcox* reference also teaches including other waxes in place of the fatty acid amide (which is a wax) in the finished jacket of the rope. The *Wilcox* reference teaches that having such a wax present in the finished jacket of the rope is "beneficial in the finished product." (Column 3, line 61)

The Examiner proposes to modify the *Wilcox* reference by eliminating the required fatty acid amide or other wax expressly taught in the *Wilcox* reference. Such a modification cannot be made because it goes directly contrary to the teachings of the *Wilcox* reference. The wax or fatty acid amide of the *Wilcox* reference is considered to be beneficial and is expressly taught as being included in the finished product. Removing that would go directly contrary to the teachings of the *Wilcox* reference and would remove an intended feature of *Wilcox's* rope. The required wax is there so that the teachings of the *Wilcox* reference can achieve the intended result (e.g., a rope including a wax in the jacket that provides a benefit).

The *Wilcox* reference expressly indicates that an object of the teachings of that reference is to use conventional rope making techniques and equipment. Including the fatty acid amide or other wax in the jacket 32 allows for using such equipment. If one were to remove the fatty acid

amide or other wax, that would require using different equipment that would have to be modified to accommodate the different type of material used for the jacket 32. In other words, using a different material for the jacket 32 instead of *Wilcox's* HYTREL with wax would require altering the rope-making equipment and technique to accommodate the different material. That would defeat *Wilcox's* stated object. The Examiner's proposed modification cannot be made because it defeats the above-quoted object of the *Wilcox* reference.

Additionally, the proposed modification cannot be made because the teachings of the *Harper* reference provide no benefit or usefulness in the context of the *Wilcox* reference. The *Harper* reference is intended to "provide a method for the manufacture of molded polyurethane articles having a paintable surface to which paint strongly adheres." (Column 2, lines 18-20) *Harper's* technique provides no benefit to the *Wilcox* arrangement because the rope of the *Wilcox* arrangement is not painted. Elevator ropes are not typically painted and there is no indication in any of the art of record for why one should be painted. Because the *Harper* reference provides no benefit in the context of the *Wilcox* reference, the combination cannot be made because the required reason for making the modification does not exist. It is not permissible to use Appellant's disclosure and claims as a road map for somehow justifying how to piece together selected portions of the prior art that are otherwise completely unrelated to each other and have no known usefulness together. Therefore, there is no *prima facie* case of obviousness.

There is yet another reason why there is no *prima facie* case of obviousness. Even if the Examiner's proposed modification were made, the result would not change the content of the jacket 32 of the *Wilcox* reference and it will still include a fatty acid amide or wax.

What the *Harper* reference actually teaches is well summarized in column 2, lines 30-43:

> Briefly, this invention comprises the treatment of a conventional mold with a waxy or oily material which may be an organic or silicone material and a subsequent coating of this already treated surface with a solid film forming, water-soluble, isocyanate reactive material. When the resultant water-soluble barrier layer is dry, a molding is made with a polyurethane mix in the conventional manner. After molding the article is easily removed from the mold, and is washed with water, aqueous detergent, or slightly alkaline aqueous solution. After drying, the surface may be painted by methods known in the art and said painted surface shows no evidence of poor paint adhesion because of residual oil or wax spots from the release agent.

In other words, *Harper* teaches treating a mold surface and later washing a molded article. That technique is no way alters (or even suggests altering) the content of the material used to make the molded article.

It follows that even if one were to use the *Harper* mold coating technique (e.g., using a release agent plus a hydrophilic water-soluable barrier layer on top of that release agent), that would not in any way change the content of the material for the jacket 32 expressly taught by the *Wilcox* reference. In other words, changing how a mold surface is coated does not change the content of the jacket material used in the *Wilcox* reference. There is nothing in the *Harper* reference that teaches using anything other than a conventional polyurethane mix. Conventional polyurethane mixes include waxes. Therefore, even if it were possible to somehow combine the *Wilcox* and *Harper* references, the result is not what the Examiner contends (i.e., *Wilcox's* jacket will still contain a wax) and there is no *prima facie* case of obviousness.

Additionally, the added steps required by the *Harper* reference are not found in conventional elevator rope making techniques. Again, the proposed combination defeats *Wilcox's* stated object of using "conventional rope making techniques and equipment."

All rejections based upon the improper proposed modification of the *Wilcox* reference with the teachings of the *Harper* reference must be reversed because the proposed modification cannot be made and even if it could, does not provide the result suggested by the Examiner. There is no *prima facie* case of obviousness.

The rejection of claims 16, 18-19, 20 and 22 based upon the proposed combination of the *Wilcox, Harper* and *Aulanko, et al.* references must be reversed.

As discussed above, the *Wilcox* reference cannot be modified with the teachings of the *Harper* reference. The proposed addition of the teachings of the *Aulanko, et al.* reference does not remedy the defect in the base combination and there is no *prima facie* case of obviousness.

Claims 24-26 are separately patentable

Even if the Examiner's proposed combination could be made and even if it did provide a result consistent with the Examiner's analysis, there still is no *prima facie* case of obviousness against any of claims 24-26 because each of these claims requires that the elongate load carrying members are metallic. The Examiner has not established any teaching of metallic load carrying members in the context of the *Wilcox* reference. Moreover, the *Wilcox* reference cannot be modified to include metallic load carrying members. The *Wilcox* rope is "made entirely of synthetic plastic materials." (Column 1, line 6) The *Wilcox* reference is specifically intended to provide a synthetic plastic rope in which the individual elements 28 consist of a KEVLAR core surrounded by a sheath of ZYTEL.

Therefore, it is not possible to modify the *Wilcox* reference in any way that would include metallic elongate load carrying members because that would remove the entirely plastic strands used in the *Wilcox* reference. It is not possible to modify the *Wilcox* reference in a way that would make it consistent with any of claims 24-26.

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CONCLUSION

The Examiner's proposed modification of the *Wilcox* reference cannot be made because it goes directly contrary to the teachings of the *Wilcox* reference, removes an intended feature of the reference and interferes with the ability of the teachings of that reference to achieve its intended result (e.g., to have a jacket 32 that includes a fatty acid amide or wax in the jacket material.) Additionally, the proposed modification cannot be made because the teachings of the *Harper* reference are inapposite to the teachings of the *Wilcox* reference and do not provide any benefit in the context of that reference. Additionally, even if the proposed modification could somehow be made, the result is not what the Examiner contends. There is no *prima facie* case of obviousness. All rejections must be reversed.

Respectfully submitted,

CARLSON, GASKEY & OLDS, P.C.

February 29, 2008
Date

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CERTIFICATE OF FACSIMILE

I hereby certify that this Corrected Appeal Brief, relative to Application Serial No. 09/921,803, is being facsimile transmitted to the Patent and Trademark Office (Fax No. (571) 273-8300) on February 29, 2008.

Theresa M. Palmateer

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APPENDIX OF CLAIMS

6. A method of making an elevator rope assembly, comprising:
arranging a plurality of elongate load carrying members in a selected arrangement; and
coating the load carrying members with a urethane coating that does not contain wax.

7. The method of claim 6, including using a thermal polyurethane coating.

8. The method of claim 6, including positioning the load carrying members within a mold and applying a release agent to the mold to enhance an ability to remove the rope assembly from the mold after the load carrying members are coated with the urethane coating.

16. The method of claim 6, including coating the load carrying members such that the urethane coating has a rectangular cross-section.

17. The method of claim 6, including coating the entire plurality of load carrying members with a single urethane coating.

18. A method of making an elevator belt, comprising:
coating a plurality of elongate load carrying members with a rectangular, waxless urethane coating.

19. The method of claim 18, including using a thermal polyurethane coating.

20. The method of claim 18, including coating the entire plurality of load carrying members with a single urethane coating.

21. A method of making an elevator rope assembly, comprising:
coating an entire plurality of elongate load carrying members with a single, waxless, urethane coating.

22. The method of claim 21, including coating the load carrying members with a coating having a rectangular cross-section.

23. The method of claim 21, including using a thermal polyurethane coating.

24. The method of claim 6, wherein the plurality of elongate load carrying members are metallic.

25. The method of claim 18, wherein the plurality of elongate load carrying members are metallic.

26. The method of claim 21, wherein the plurality of elongate load carrying members are metallic.

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EVIDENCE APPENDIX

None.

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RELATED PROCEEDINGS APPENDIX

None.